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BEYOND ROAD'S END

A BACKCOUNTRY USER'S GUIDE TO YELLOWSTONE NATIONAL PARK

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Camping in the park is limited to 7 days in a single period or combined separate periods between July 1 and August 25, and to 30 days in any one year.

NOTES:

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WELCOME

The National Park Service is dedicated to conserving Yellowstone National Park in its natural state. To help visitors safely enjoy the backcountry, and to lessen their impact on the natural resources, the Service has established a backcountry use management program. The regulations and recommendations given in this booklet are parts of that program.

This booklet will help you plan your trip into Yellowstone's backcountry. We ask your help in maintaining one of America's greatest natural areas.

INFORMATION SOURCES

Maps and trail guidebooks of Yellowstone National Park are available at visitor centers and some ranger stations or can be requested by mail from Yellowstone Library and Museum Association, Yellowstone National Park, Wyoming 82190. Maps are also available from the Distribution Section, U.S. Geological Survey, Federal Center, Denver, Colorado 80225.

EMERGENCY REPORTING

Anywhere in the park, 24 hours a day, dial 911.

REGULATIONS

To protect the backcountry of Yellowstone and to provide visitors with a safe, enjoyable wilderness experience, the National Park Service has established the following regulations. These regulations are enforced. Do yourself and the park rangers a favor by doing your best to comply. If you have any questions about the regulations, contact a park ranger for an explanation.

Backcountry Use Permits are required to stay overnight or to build a fire outside auto campgrounds. Permits are available only in person (not by mail or by phone except for winter expeditions), and only 48 hours in advance.

You need a boat permit to use a floating craft in the park. All park streams are closed to boating except the Lewis River between Shoshone and Lewis Lake.

You need a Yellowstone National Park fishing permit in your possession while fishing in park waters, if you are 12 years of age or older. State fishing licenses are not required. You will be given a fishing regulations folder when you pick up your license.

Pets are not permitted in the backcountry. Dogs and cats on leash, crated or otherwise under physical restraint, are permitted in the park only within 100 feet of established roads and parking areas. Dogs and cats are prohibited on established trails and boardwalks.

Firearms and wheeled or motorized vehicles are prohibited on trails or in the backcountry.

To prevent access by bears, hang all food not being eaten, prepared for eating, or being transported

Hang it at least ten feet above the ground and at least four feet horizontally from any post or tree trunk (see illustration, page 17).

Park regulations prohibit disturbing, destroying, possessing or removing any plant, animal or mineral substances. Collecting antlers is prohibited. Antlers shed by large animals are consumed by smaller animals; leave them in place. Leave archaeological or historical items in place. Take pictures, and report your discoveries to a park ranger.

Your party may not exceed limits on numbers of people and stock specified for each campsite, and noted on your permit. One party may not occupy one backcountry campsite more than three nights on one trip (fewer nights in heavily used areas).

Camping in the park is limited to 14 days either in a single period or combined separate periods between July 1 and Labor Day, and to 30 days in any one year.

You may use open wood fires only in established fire sites in designated campsites. Do not build new fire rings. Use only dead and down material for firewood. Do not break limbs from trees. Attend your fires, and completely extinguish them before leaving

your campsite. Backpacking stoves are recommended. In undesignated or "cross-country" route sites, open wood fires are not permitted. Use only backpack stoves.

Carry out noncumbustible refuse and all unburned combustible refuse from the backcountry.

Dispose of waste water at least 100 feet (30 meters) from your campsite or from any park waters. It is unlawful to pollute park waters by washing yourse'f, dishes or clothing in them. Bathing in thermal pools and their runoff streams is prohibited.

You may not dig to trench around tents or to level sleeping sites. Using chainsaws or generators is prohibited.

Audio devices — radios, tape players, etc. — may not be played at times or at loudness levels that annoy other visitors.

RECOMMENDATIONS FOR ALL BACKCOUNTRY USERS

"Backcountry" is defined as any part of the park more than 250 yards from paved roads and more than one-half mile from park facilities other than trails and patrol cabins.

You need a Backcountry Use Permit to build a fire or to stay overnight in any area except auto campgrounds. Free Backcountry Use Permits and information are available at the following ranger stations (R.S.) and visitor centers (V.C.) in the summer.

Mammoth R.S. and V.C.	Grant Village R.S.
Tower R.S.	South Entrance R.S.
Northeast Entrance R.S.	Becher R.S.
Canyon R.S. and V.C.	Old Faithful R.S.
Lake R.S.	Madison R.S.
Bridge Bay Marina R.S.	West Entrance R.S.
East Entrance R.S.	Norris Campground R.S.

Camp in the backcountry only in sites or areas designated on your Backcountry Use Permit, and only on the dates assigned. Keep wood fires small, and use existing fire rings only.

There are over 1,000 miles (1,610 km) of trails winding throughout the park. Travel off-trail is difficult and is not recommended. It is easy to become lost when you are not familiar with the area, and there are no prominent landmarks. Carry a topographic map of the area and a compass, and know how to use them. Solo hiking is not advised. Even the most experienced hiker can get into trouble. By yourself, you have little chance of obtaining help.

Streams may be in flood stage from May through July due to snowmelt runoff. If you must ford a stream or river, face sideways to the current to lessen water resistance, and use a strong pole as a brace downstream. Where water is deeper than mid-thigh, link arms or use a safety rope, or search for a more shallow area to ford.

If you fall into cold water, you are in serious danger. Exposure to cold, especially when you are wet, combined with exhaustion can cause you to lose heat faster than you can replace it, resulting in hypothermia and possible death. You must *prevent* it. Cold first dulls your judgment and disables your hands, so you are less able to take care of yourself.

Recognize the danger of hypothermia. Most cold deaths happen in air temperatures between 30°F and 50°F. Water at 50°F is unbearably cold. Stay dry. Wet clothes lose most of their insulating value. Put on rainwear *before* you are wet; put on a wool cap and sweater *before* you are chilled. Balance activity and clothing to prevent sweating. Protect yourself from wind. A breeze carries heat away rapidly, and blows rain under a poncho.

If you begin to shiver, stop what you are doing. Get out of the wind and rain. Camp and build a fire. The moment you stop, your body produces 50% less heat than it did while you were hiking. Put on dry clothes. Eat sugary or starchy foods. Avoid alcohol, which causes you to lose heat rapidly. Watch for symptoms of body cooling—shivering, slurred speech, memory lapses, rigid hands, stumbling, drowsiness and exhaustion.

Treat even mild symptoms immediately and aggressively. Get the cold person out of the wind and rain. Strip off all wet clothes and replace them with dry ones. Give the person warm, sweetened drinks. Get the person into a sleeping bag on a pad, but keep the person awake. If the person loses consciousness, keep nose and mouth passages clear and add warmth from another person or two persons, by skin-to-skin contact in the sleeping bag.

Lightning storms happen frequently during sum-

mer. Get off the water or the beaches when these storms approach. During storms, stay away from ridges, exposed places and isolated trees. Look for level forested areas for shelter. Thick lodgepole pine forests with trees of equal height offer better protection than the more irregular Douglas fir or spruce forests. If you are caught out in the open in a large meadow, crouch low, head down, with only your feet touching the ground. Squat, head down, on a foam pad if you have one.

Be careful in thermal areas. Do not approach backcountry thermal features too closely; thin crust overlying boiling water can be deadly! For your safety, don't enter thermal areas after dark. Particularly, stay clear of areas that are barren of plant growth. It takes hundreds of years to build up the fragile crust of minerals that surround thermal features. Careless walking is not only dangerous but destructive. Taking souvenirs, altering or putting objects into any thermal feature is forbidden. Bathing or swimming in any thermal pool or runoff channel in Yellowstone National Park is damaging, dangerous, and unlawful. Leave this fragile beauty for others to enjoy.

Mosquitoes, gnats, black flies and larger biting flies can make an otherwise beautiful trip miserable. Ticks are also present in sagebrush and wooded areas. Repellents, head nets, gloves, and mosquito-proof tents can help.

Lakes and streams in the park are commonly used as a source for drinking water. All waters may be polluted by animal and or human wastes. Water should be boiled for 12 minutes or treated with iodine to reduce your chance of infection. Other means of purification may be ineffective against giardia, bacteria that cause stomach disorders.

Proper disposal of human waste where there are no toilets is very important. Human wastes become a sanitation problem if not buried correctly. Carry a small digging tool, such as a light garden trowel.

Select a spot at least 100 feet from any watercourse and dig a hole 8 to 10 inches in diameter, but no deeper than 6 to 8 inches. Bacteria and other organisms live in this soil level and will naturally decompose wastes in several days. After use, fill in the hole with loose soil and tramp in the removed sod. If you have no trowel or shovel, it may be possible to dig a hole with the heel of your boot or a stick, or perhaps you can overturn a half-buried rock or log to make a hole. Replace the rock. A narrow latrine trench for larger parties is better than numerous "catholes." Never use latrines or pit toilets for trash or garbage disposal. It attracts bears.

Ten essentials checklist:

Map — USGS 15-minute quadrangles are best.
Compass — Read instructions and practice with it.
Flashlight or headlamp, fresh batteries and spare bulb.
Extra food, secure in plastic bags.
Extra clothing — wool cap, mittens, rain gear, socks, etc.
Sunglasses, sunscreen, insect repellent.
Knife, sharp.

Matches, waterproof, or butane lighter
Fire starter — candle, etc.
First aid/emergency kit

FOR HIKERS

Heat exhaustion can be disabling in summer. Drink 1 to 2 quarts of water per day when hiking in hot weather. Wear light clothing including a hat.

If you meet horses on the trail, give them a wide berth. On a sidehill, move to the downhill side of the trail to avoid accidently sliding under the horse's feet. Move well off the trail, but where you can be seen, and stand still; without waving or shouting.

FOR BOATERS AND ANGLERS

Boating on cold, high elevation lakes is extremely dangerous. Intensely cold water disables anyone immersed for even a few minutes. Wearing life jackets and protective clothing is imperative. Boating permits are required.

Wind can sweep large lakes without warning, generating large waves, even on cloudless days. Stay close to shore. Avoid crossing large lakes, particularly at midday, when thunderstorms are common.

Required Yellowstone National Park fishing permits are free, and may be obtained at ranger stations and visitor centers. Fishing regulation folders are available at the same locations.

REQUIREMENTS FOR RIDERS

Take no more horses than you actually need. The fewer the better — 25 is the maximum, but may be fewer in certain areas of the park, to lessen impact. Some trails under wet, boggy conditions may be closed to horse use until they are dry enough to accommodate horses without being damaged.

Stay on the trail. Do not shortcut. Repeated horse use causes erosion and can cut a new trail, which will confuse others coming later and unnecessarily scar the country.

Free trailing or loose herding is not allowed on park trails. All animals not ridden must be led. This is both for safety of other trail users and keeps new, unnecessary trails from being cut into meadows.

Pellets and grain, but no hay, may be carried to supplement grazing.

Picket or hobble stock well away from the trail, and always at a reasonable distance from campsites, lakes and streams. Change pickets frequently. Avoid over-grazing one area or a particular campsite.

Hobbles are preferable, but, if you use picket pins, pull them all when leaving since they are an eyesore to later comers and tempt others to use the same spot.

The cutting of standing trees, tree limbs or shrubs for picket pins is not permitted. Parties planning to use picket pins must carry them. Tying stock to living or dead trees, shrubs, stumps, logs, hitch-posts, or hitchrails for extended periods of time, so that damage to vegetation or soil results, is prohibited.

Corrals and drift fences are prohibited. For packing or saddling where there are no hitch rails, tie stock to a heavy rope slung between two trees.

When you break camp, clean out and scatter any horse droppings from in or near your campsite.

If you lose an animal and cannot find it by the end of your trip, be sure to report its loss to the nearest ranger station.

NATURAL FIRES

There will be occasions during the warm, dry weather of summer when forest fires will start in Yellowstone National Park from natural causes. Thunderstorms in the Rockies often produce lightning without rainfall. These "dry" strikes can easily start a fire.

You may occasionally encounter these fires in the backcountry. In many areas of the park, lightning-caused fires are being permitted to burn without interference. Even these allowable fires will be monitored, and may have observers in attendance for research purposes. Any unattended fire should be reported to the nearest ranger station. Do not

attempt to put out a fire unless it is small and obviously man-caused.

Research has shown that natural fires have been part of Yellowstone's environment for thousands of years prior to our efforts to control them. Large fires burned at average intervals of 20 to 25 years in the vast lodgepole pine forests, and less frequently in the grasslands at high elevations.

For more information on the natural fires program, ask for a free leaflet on this subject at any ranger station.

BEARS AND OTHER ANIMALS

Bears are wild and dangerous. They can injure or kill you, and can destroy your camp. They are particularly dangerous when startled, when cubs are present, when approached too closely, or when they have lost their fear of man. The Greater Yellowstone Area is the home of 200-400 grizzly and perhaps twice that many black bears.

Avoid large animals such as moose, bison, elk and deer at close range, especially during mating season or when young animals are present. While bears or large animals cause greatest concern, remember

too that small rodents, porcupines, squirrels, chipmunks, and other animals can ruin your tent or backpack in their quest for food.

Rattlesnakes are found at low elevations in the north end of the park.

In bear country, there are no hard and fast rules to insure protection from bear attacks. Bear behavior varies, but the following precautions are strongly recommended.

Do not hike alone. Injuries most often have occurred to one or two hikers. Groups of four or more are recommended, and required in some areas of the park. Hike only during daylight hours. Use special caution when sight is limited by bends in trails or heavy cover, or when hearing or scent are covered by high winds, or by rushing streams.

Bear droppings, tracks, and diggings indicate that bears are in the area. If you see a bear at a distance, make a wide detour around it, keeping upwind so that the bear will get your scent and not be startled.

Bears usually avoid people, so let them know you are there. Many hikers tie bells to their packs. Most bear attacks are caused by suddenly encountering a sow with cubs. Whistling and loud talking can serve the purpose of warning a bear of your presence, but are difficult to keep up continously.

Avoid all cosmetics, perfumes, scented lotions, and

deodorants. Bears are attracted or irritated by these scents. The odors of menstruation attract bears. The odor of sexual intercourse may also attract bears.

Do not camp in an area frequented by bears. Do not camp on the trail. Avoid camping on ridge tops, streambanks and lakeshores. They are natural travelways and feeding areas for bears. If you suddenly meet a bear, stay calm. Do not run. Running may cause a bear to chase you. Do not move toward the bear. It may feel threatened and become defensive. Bears are curious. As soon as the source of disturbance has been identified, the bear may leave. A grizzly will often rise on its hind legs to investigate. If it does, it may be effective to speak softly; steady, soft human monotones may reassure the bear that you are not a threat. At the same time, look for a tree to climb. Mature grizzlies can climb a short distance, and black bears can climb very well. The tree must be tall enough to get you out of the reach of the bear. As a delaying action, drop some sizeable item, such as your pack, camera bag, or sleeping bag, which may divert the bear's attention and give you more time to retreat. If you can get into a tree, stay there until you are certain that the bear is out of the area. If you cannot reach a tree and the bear continues to advance, your best chance may be to play dead. As a last resort, lie on your stomach or on your side with your legs drawn up to your chest, and clasping your hands over the back of your neck. Grizzlies have passed by people in this position without harming them. Others have been only slightly injured when the bear made one or two half-hearted slaps at them. Never harass a bear unless it is actually attacking someone. In such an emer-

gency, try to distract the bear from its victim(s) by shouting or throwing sticks, rocks, or any handy object. In any event, do not run blindly down the trail or through the brush hoping to outdistance the bear. It will only excite the animal, and bears can easily run at twice the speed of the fastest human.

A MOTHER GRIZZLY WITH CUBS IS A SPECIAL HAZARD

Most encounters and injuries in Yellowstone's backcountry and several serious attacks that have taken place here and in other national parks have occurred when people came upon a female grizzly with cubs. The mother's protective instinct is highly developed and she looks upon intruders as a threat to her family. She may attack, charging and slapping with her forepaws at the nearest person, and then pass on to others. If the human intruders have dropped to the ground to play dead, the sow may sniff each one and perhaps claw and bite them before moving her cubs to safety. Lying still under the jaws of a biting bear takes a lot of courage, but it may prevent greater injury or death. Resistance normally would be useless.

DON'T INVITE BEARS INTO YOUR CAMPSITE

Make your fire and cook at your designated campsite, using the established fire pit or backpacker's stove. Separate your sleeping and cooking areas by sleeping some distance away from your

cooking site. Camp where trees are handy and the kind you can climb. Place the open end of the tent close to these trees and sleep with your head at that end. This may provide an exit toward safety if the need arises.

Dispose of fish viscera in the water in which you caught the fish. Throw the entrails away from shore into deep water. Part of a fish carcass decaying in a lake or stream is no more ecologically wrong than the entire carcass of a fish dying a natural death in the same water. Puncture the air bladder so the viscera will sink to the bottom. In bear country especially, this is a far better method of disposal than dropping the viscera near a stream bank, burying them near a campsite, or trying to burn them in a fire.

Burn all combustible trash, tin cans, and all noncumbustible trash (except glass) to destroy odors. Then take cans and foil from the cold ashes, flatten and pack them out to the trailhead for deposit in trash containers. Burying does not work because cans will be dug up later by bears. Burying only trains bears to search for food around campsites, and could result in a bear harassing or injuring the next camper there. Wash your dishes, and dispose of the dish water far from your campsite.

Food, cooking utensils, and any scented articles such as soap, deodorants, suntan lotion or gum and garbage should be stored out of the reach of all

animals and away from the sleeping area. Suspend them in a bag or pack by a 50-foot nylon line between two tall trees at least 10 feet above the ground and 4 feet from either tree. Avoid cooking greasy, odorous foods such as meat. Avoid cooking more food than you can eat. Dehydrating any excess food in a frying pan will render it almost as light as when you packed it in. Even outer clothing that you wore while cooking might be stored overnight with your food. Keep tents and sleeping bags clean and free of food odors. Never use them as storing places for any food or sweet drinks. A clean camp reduces the possibility of, but does not insure against, a visit by a bear.

There are no guarantees in bear country. The hazard of a bear encounter is low, but very real. If you cannot accept the possibility of an encounter, then hike elsewhere.

Tell a park ranger about sightings, damage, or confrontations with bears.

THE FUTURE OF YELLOWSTONE'S WILDERNESS

Park management objectives are to "perpetuate the natural ecosystems within the park in as near pristine conditions as possible for their inspirational, educational, cultural, and scientific values for this and future generations," and to "permit natural processes to function with the park ecosystems with minimum disturbance by man's activities."

You can help. Follow the guidelines presented in this booklet. Explore ways of traveling that leave the least sign of your passing. Use a stove instead of a campfire. Leave a clean campsite. Blend your clothing, equipment, voice and behavior with your surroundings; unobstrusive, well-mannered. Avoid traveling in very large groups. Leave axes, saws, radios, and tape players at home. Show others that you understand and share their search for contemplative, reflective recreation. Take only pictures; leave only footprints.

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SUGGESTED READING

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